

LAND APPLICATION OF BIOSOLIDS
SHEP'S POINT LLC

LO173 (FIELDS 1 - 11)
LOUISA COUNTY, VIRGINIA
APRIL 2014





April 24, 2014

Mr. Ed Stuart
Dept of Environmental Quality
Northern Virginia Regional Office
13901 Crown Court
Woodbridge, VA 22193

Dear Mr. Stuart:

Transmitted herein for your consideration is land application site for Shep's Point LLC (designated as LO173, fields 1 - 11), located in Louisa County, Virginia. This submission contains strictly site specific information. Please refer to the operations and maintenance manual submitted under separate cover for all non-site specific information.

Do not hesitate to contact me at (804) 443-2170 should you have any questions or require additional information.

Sincerely,

Steve McMahon
Technical Services Director

KML/cmw

Synagro Central, LLC

10647 Tidewater Trail, Champlain, VA 22438 * Ph: (804) 443-2170 * Fax (804) 443-2214



FIELD SUMMARY SHEET

Shep's Point LLC

LO173

SYNAGRO FIELD #	GROSS ACRES	NET ACRES	FSA TRACT #	FSA FIELD #	TOPO QUAD	OWNER
173-01	11.2	9.0			Boswells Tavern	Somoza, Nancy Daniel Trustee
173-02	20.8	20.8			Boswells Tavern	Somoza, Nancy Daniel Trustee
173-03	25.7	23.1			Boswells Tavern	Somoza, Nancy Daniel Trustee
					Zion Crossroads	
173-04	16.9	15.2			Zion Crossroads	Somoza, Nancy Daniel Trustee
173-05	6.6	6.5			Boswells Tavern	Somoza, Nancy Daniel Trustee
					Zion Crossroads	
173-06	16.5	16.2			Boswells Tavern	Somoza, Nancy Daniel Trustee
					Zion Crossroads	
173-07	46.2	45.3			Zion Crossroads	Somoza, Nancy Daniel Trustee
173-08	17.0	15.6			Zion Crossroads	Somoza, Nancy Daniel Trustee
173-09	7.5	7.4			Zion Crossroads	Somoza, Nancy Daniel Trustee
173-10	40.7	40.1			Zion Crossroads	Somoza, Nancy Daniel Trustee
173-11	9.6	9.3			Zion Crossroads	Somoza, Nancy Daniel Trustee
TOTALS:	218.7	208.5				

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 12/10/13 between Sheps point LLC referred to here as "Landowner", and Synagro, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Louise, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges

<u>Tax Parcel ID</u>	<u>Tax Parcel ID</u>	<u>Tax Parcel ID</u>	<u>Tax Parcel ID</u>
<u>53-38</u>			
<u>53-1</u>			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:

- ☒ The Landowner is the sole owner of the properties identified herein.
☐ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 36 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
X Yes <input type="checkbox"/> No	X Yes <input type="checkbox"/> No	X Yes <input type="checkbox"/> No	X Yes <input type="checkbox"/> No

Sheps Point LLC. Sheps Point LLC.
Landowner — Printed Name, Title Signature Mailing Address

Permittee:

Synagro, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

LEE C. Rosson 10647 Tidewater Trail
Permittee — Authorized Representative Signature Mailing Address
Printed Name

Permittee: SynagroCounty or City: LouisaLandowner: Sheps Point LLC**Landowner Site Management Requirements:**

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil.
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Sheps Point LLC. Richard D. [Signature]
Landowner's Signature

12/10/13
Date

Tax ID Landowner Identification Sheet

Landowner	Field #	Tax ID
Shep's Point LLC	173-01	53 - 1
	173-02	53 - 3 - B 53 - 1
	173-03	53 - 1 53 - 3 - B
	173-04	53 - 3 - B
	173-05	53 - 3 - B
	173-06	53 - 3 - B
	173-07	53 - 3 - B
	173-08	53 - 3 - B
	173-09	53 - 3 - B
	173-10	53 - 3 - B
	173-11	53 - 3 - B

Field #	Latitude (north)	Longitude (west)
173-01	37° 59' 54.40"	78° 09' 15.87"
173-02	37° 59' 53.22"	78° 09' 23.11"
173-03	37° 59' 57.08"	78° 09' 33.01"
173-04	37° 59' 49.45"	78° 09' 37.61"
173-05	37° 59' 59.24"	78° 09' 45.10"
173-06	37° 59' 51.54"	78° 09' 49.33"
173-07	37° 59' 39.79"	78° 09' 33.99"
173-08	37° 59' 41.95"	78° 09' 19.30"
173-09	37° 59' 35.71"	78° 09' 19.26"
173-10	37° 59' 28.11"	78° 09' 31.85"
173-11	37° 59' 30.70"	78° 09' 41.71"



Tax Map ID 53-1



Scale: 1:9027.977411

Date: 06/04/2012

Printed By: Carolanne Whiteside

Loudoun County assumes no liability for any errors, omissions, or inaccuracies in the information provided regardless of the cause of such or for any decision made, action taken, or action not taken by the user in reliance upon any maps or data provided herein. Please consult official County plats and records for official information.



Tax Map ID 53-3b



Scale: 1:18055.954822

Date: 06/04/2012

Printed By: Carolanne Whiteside

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L0173

Field	Map Unit	Acres	Percentage	Soil Series	High Water	Flood
173-01	ZoC2	6.5	45	Elbert	Nov - May	
	ZoB2	5.0	35			
	Eb	2.8	20			
173-02	ZoB2	9.2	43			
	ZoC2	4.0	19			
	CuB2	2.7	13			
	FIB2	2.7	12			
	FIC2	1.7	8			
	ZoB	1.2	5			
173-03	FIC2	5.4	24			
	MuB2	5.5	24			
	ZoC2	3.7	17			
	CwC3	2.9	13			
	FIB2	2.7	12			
	ZoB2	2.3	10			
173-04	ZoC2	8.6	57	Elbert Iredell	Nov - May Dec - April	
	FIC2	2.4	16			
	FIB2	1.7	11			
	Eb	1.2	8			
	IrB	1.1	8			
173-05	MuC2	3.0	46	Sekil Elbert	Nov - May	
	SeD	1.7	27			
	CwC3	1.1	17			
	Eb	0.6	10			
173-06	CuB2	5.9	38			
	PxC	5.2	33			
	CwC3	2.0	12			
	MuC2	1.4	9			
	ZoB2	1.3	8			
173-07	ZoC2	10.8	25	Iredell	Dec - April	
	FIB2	10.3	24			
	FIC2	8.1	19			
	ZoB2	5.6	13			
	IrB	5.5	12			
	CuB2	3.1	7			
173-08	ZoB	6.9	44	Elbert	Nov - May	
	ZoC2	4.0	26			
	Eb	3.5	22			
	ZoB2	1.2	8			
173-09	Eb	4.5	60	Elbert	Nov - May	
	ZoC2	2.2	29			
	ZoB2	0.5	6			
	CuB2	0.3	5			

173-10	ZoB2	13.2	34
	CuB2	12.1	31
	FIC2	6.8	17
	FIB2	4.4	11
	AbB	2.8	7

173-11	FIC2	5.7	64
	FIB2	3.2	36

Environmentally Sensitive Areas

Field	Reason for Sensitive Area
173-01	High Water Table (Map Unit Eb - 20%)
173-02	None
173-03	None
173-04	High Water Table (Map Units Eb, IrB - 16%)
173-05	High Water Table (Map Unit Eb - 10%) Leaching Potential (Map Unit SeD - 27%)
173-06	None
173-07	High Water Table (Map Unit IrB - 12%)
173-08	High Water Table (Map Unit Eb - 22%)
173-09	High Water Table (Map Unit Eb - 60%)
173-10	None
173-11	None

Louisa County Soils that are Environmentally Sensitive

Soil Map Unit	Series Name	Time of year		Environmental
		High Water	Flooded	
AsB, AsC, AsD	Ashlar			Leaching
AsC3, AsD3	Ashlar			Leaching
AV	Ashlar			Leaching
Ch	Chewacla	Nov - April	Nov - April	
CIB	Colfax	Nov - June		
Eb	Elbert	Nov - May		
FN	Fluvaquents	Nov - April	Nov - April	
Fo	Forestdale	Jan - April	Jan - April	
FrB	Fork	Oct - May	Oct - May	
IdB	Iredell	Dec - April		
IdB2, IdC2	Iredell	Dec - April		
IrA, IrB	Iredell	Dec - April		
Iv	Iredell	Dec - April		
LgB	Lignum	Dec - May		
MnB, MnC, MnD	Madison			Shallow
MoC, MoD	Madison			Shallow
SeB, SeC, SeD	Sekil			Leaching
SeC3	Sekil			Leaching
SP	Sekil			Leaching
To	Tocca		Jan - Dec	
Ts	Tocca		Jan - Dec	
We	Wehadkee	Nov - May	Nov - June	
WH	Wehadkee-Chewacla	Nov - May	Nov - June	
WoB	Worsham	Nov - May		

MAP LEGEND



House/Dwelling with a well



Rock Outcrop



Well



Lake/Pond



Slope which exceeds 15%



Intermittent Stream



Stream/River



Agricultural/Drainage Ditch

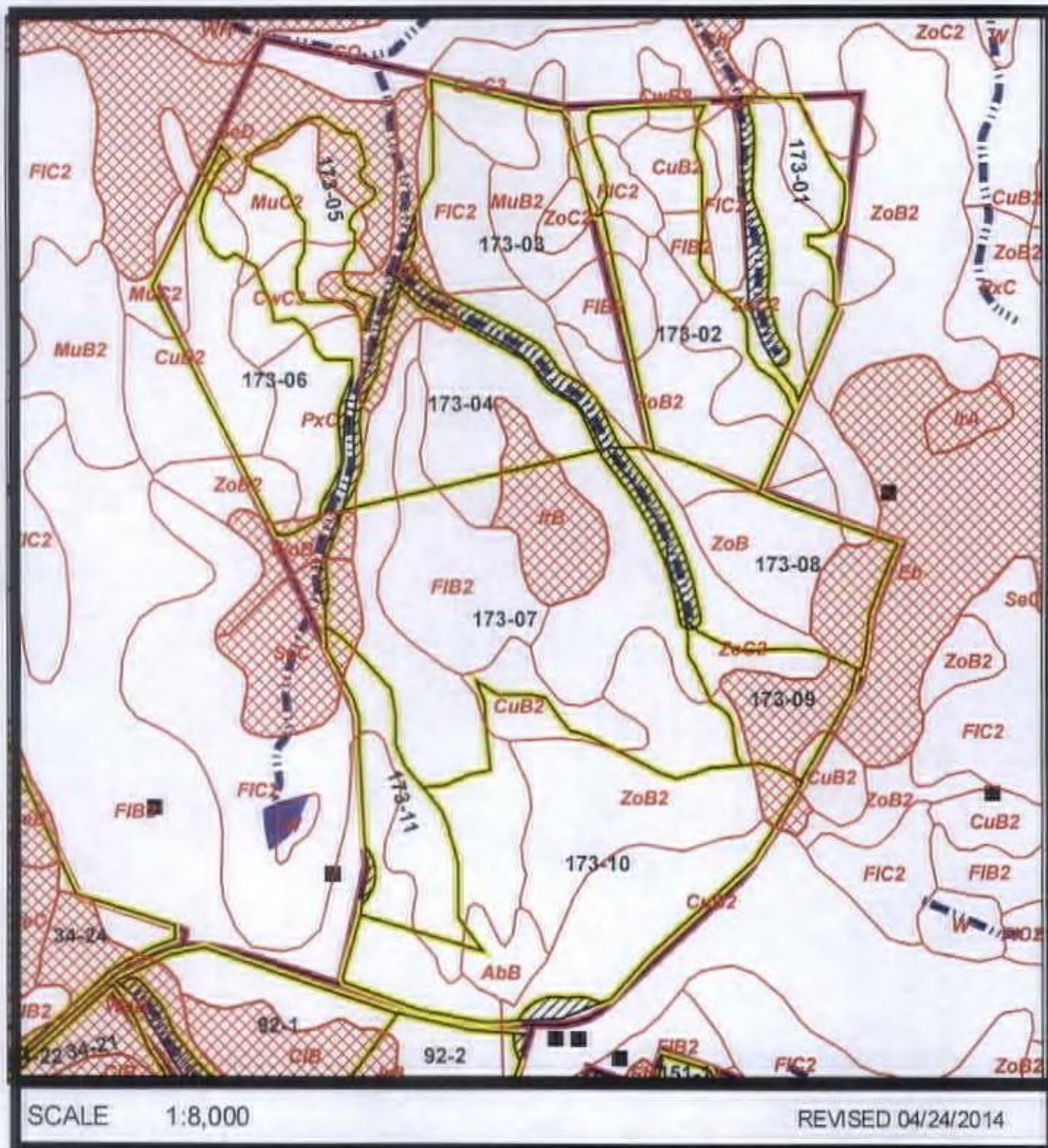


Field boundary



Property Line – (Standard 100'
Buffer, unless waiver issued)

Revised: Jan. 13, '14



SOIL MAP

 Environmentally Sensitive Soil



SYNAGRO

Shep's Point LLC
LO173
Fields 1 - 11

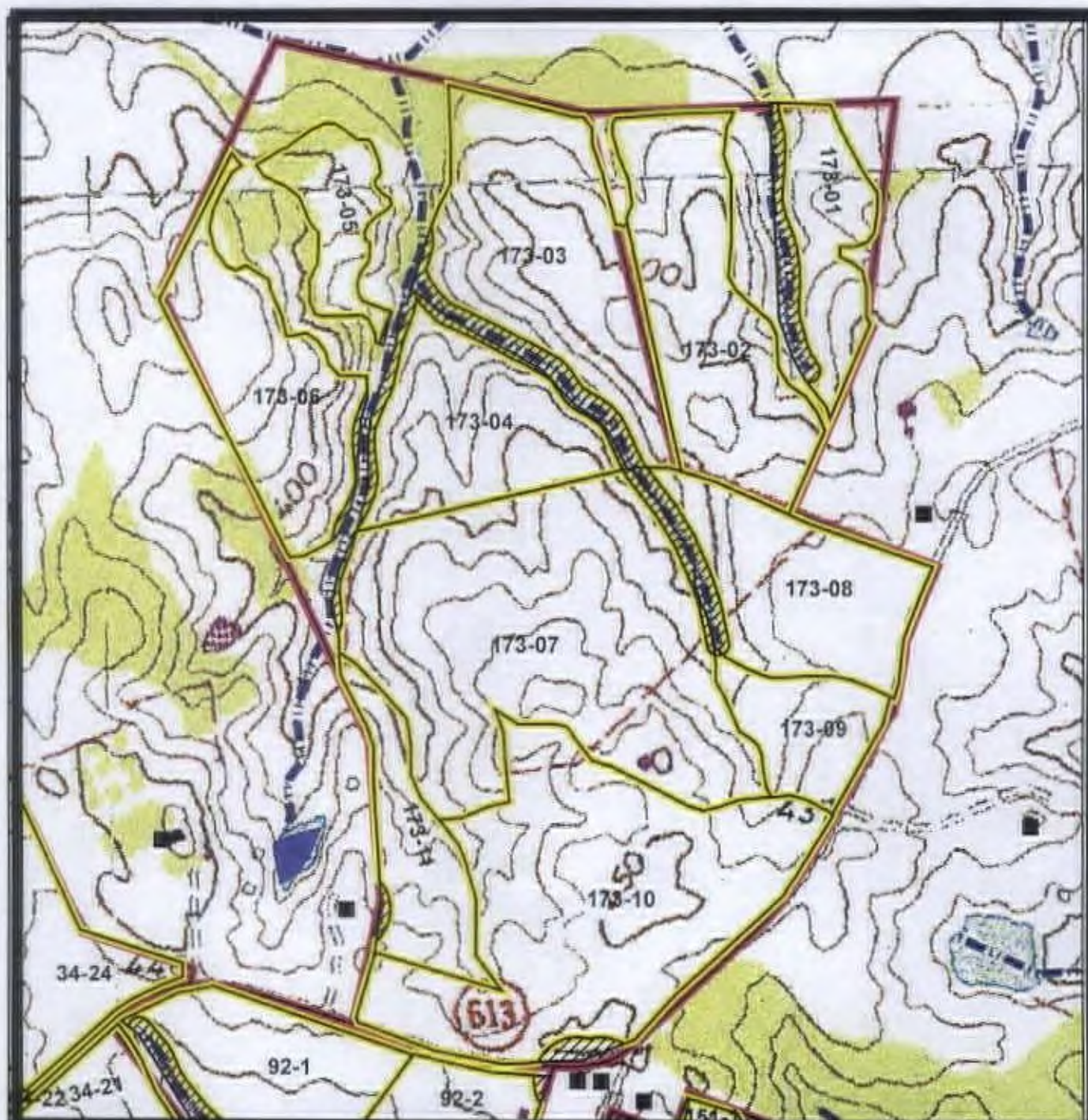


AERIAL MAP

□
N
□

SYNAGRO

Shep's Point LLC
LO173
Fields 1 - 11



SCALE 1:8,000

REVISED 04/24/2014

TOPO MAP

□
N
□

SYNAGRO

Shep's Point LLC
LO173
Fields 1 - 11

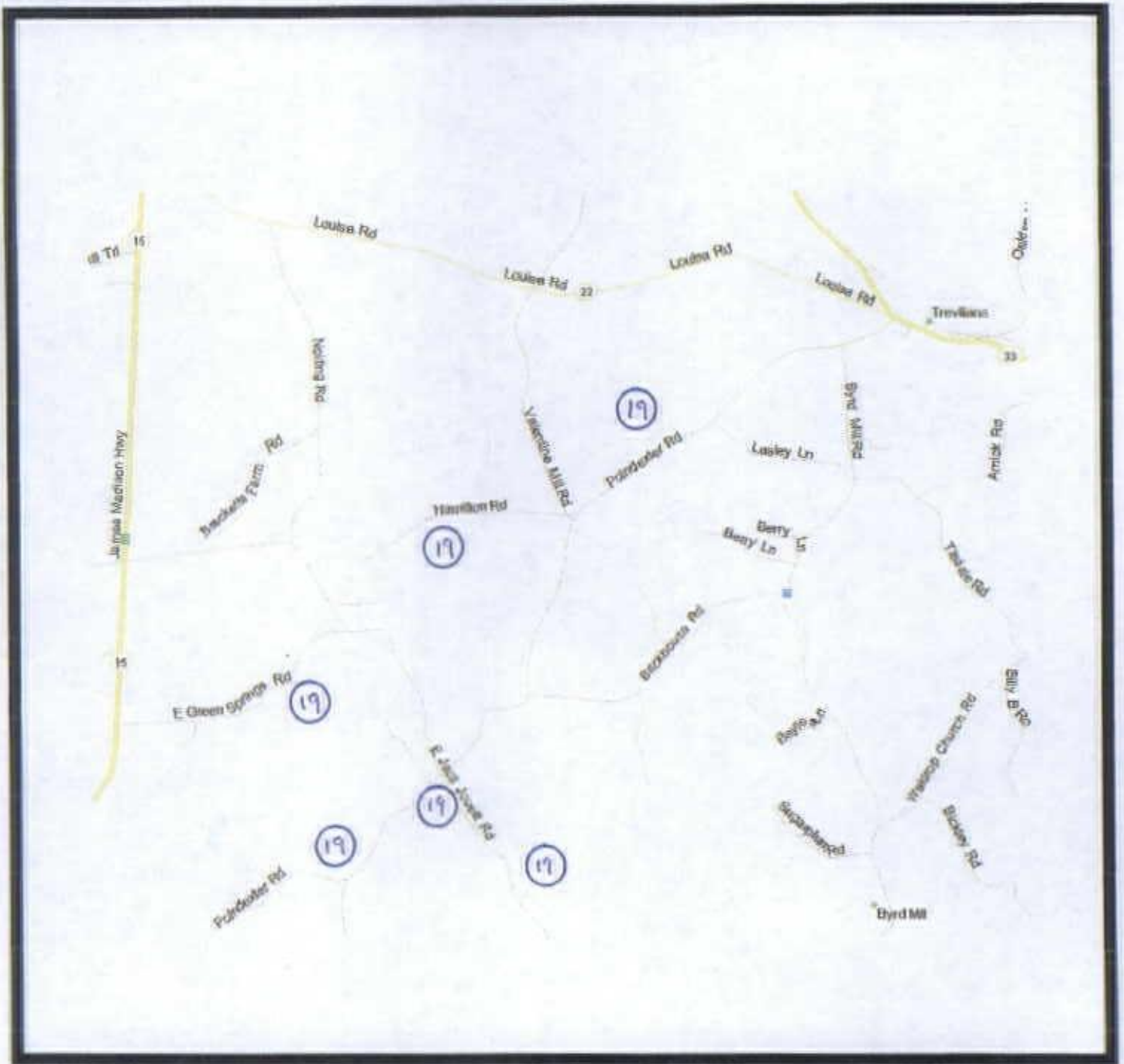


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REVISED 04/24/2014

TOPO MAP

N



LOCATION MAP

